

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Egisto BOSCHETTI et al.

Title: PREPARATION AND USE OF MIXED MODE

SOLID SUBSTRATES FOR

CHROMATOGRAPHY ADSORBENTS AND

BIOCHIP ARRAYS

Appl. No.: 10/660,738

Filing Date: 09/12/2003

Examiner: Not Yet Assigned

Art Unit: Not Yet Assigned

<u>INFORMATION DISCLOSURE STATEMENT</u> <u>UNDER 37 CFR §1.56</u>

Commissioner for Patents PO Box 1450 Alexandria, Virginia 22313-1450

Sir:

Submitted herewith on Form PTO-1449 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56. Copies of documents listed under A13-A21 are being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR §1.97(b), before the mailing date of the first Office Action on the merits.

RELEVANCE OF EACH DOCUMENT

All of the documents are in English.

Applicants respectfully request that any listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO-1449 be returned in accordance with MPEP §609.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

Respectfully submitted,

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Form PTO-1449		U.S. DEPARTMENT OF COMMERCE			ATTY. DOCKET NO.		SERIAL NO.		
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EXAMINER		DOCUMENT					SUB-	FILING	DATE
INITIAL	REF	NUMBER	DATE		NAME	CLASS	CLASS		F PRIATE
	A1	4,381,239	04/26/1983	CHI	BATA et al.			1	
	A2	4,701,500	10/20/1987		RATH				
	A3	5,234,991	08/10/1993	TAY	OT et al.			·	_
	A4	5,652,348	07/29/1997	BUF	RTON et al.				-
	A5	5,185,313	02/09/1993	PORATH				<u> </u>	_
	A6	5,075,371	12/24/1991	BOSCHETTI et al.				<u> </u>	
	A7	5,141,966	08/25/1992	PORATH				<u> </u>	
	A8	5,268,097	12/07/1993	GIR	OT et al.			 	
	A9	5,719,060	02/17/1998	HUTCHENS et al.				·	
	A10	6,124,137	09/26/2000	HUTCHENS et al.					
A11		2001/0045384	0045384 STI		PANOVIC et al.			04/30/2001	
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	NEI -	NUMBER						YES	NO
	A13	WO 95/31279	11/23/1995	WIP					
	A14	WO 96/00735	01/11/1996	WIP	0				
	A15	WO 03/064594	08/07/2003	WIP	0				
		OTHER DOCU	MENTS (Includ	ing A	uthor, Title, Date, Pe	ertinent Pages,	Etc.)		
	A16	G. H. SCHOLZ et a	al., "Salt-independ of Chromatograph	dent E	Binding of Antibodies fro	om Human Seru (1998)	ım to Thiophi	lic Hetero	cyclic
						. ,		·	
	A17	S. C. BURTON et and Facile elution	al., "Hydrophobic with Aqueous Buf	Chare fers",	ge Induction Chromatogournal of Chromatogournal	graphy: Salt Ind raphy a, vol. 814	ependent Pro 1, pgs. 71-81	otein Adso (1998).	rption
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OTHER DOCUMENTS (cont'd)										
TEN.	NAT CO	I								
TRADE	A18	L. GUERRIER et al., "New Methods for the Selective Capture of Antibodies Under Physiological Conditions", Bioseparation, vol. 9, pgs. 211-221 (2000).								
	A19	E. BOSCHETTI, "The Use of Thiophilic Chromatography for Antibody Purification: A Review", J. Biochem. Biophys. Methods vol. 49, pgs. 361-389 (2001).								
	A20	BO-LENNART JOHANSSON et al., "Preparation and Characterization of Prototypes for Multi-Modal Separation Media Aimed for Capture of Negatively Charged Biomolecules at High Salt Conditions", Journal of Chromatography A, vol. 1016, pgs. 21-33 (2003).								
	BO-LENNART JOHANSSON et al., "Preparation and Characterization of Prototypes for Multi-Modal Separation A21 Aimed for Capture of Positively Charged Biomolecules at High-Salt Conditions", Journal of Chromatography A, vol. 1016, pgs. 35-49 (2003).									
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